Unification of Subatomic Quantum Spin and Cosmological Dark Matter via the Septenary Geometry of the Trishul-Dhamru Matrix (TDM) Framework

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Abstract

This paper presents the complete, unified mathematical and topological formulation of the Trishul-Dhamru Matrix (TDM) framework, a core sub-framework of the K7 Theory (Universal Rule of Seven). Standard modern physics remains bifurcated by the incompatibility between Quantum Mechanics (QM) and General Relativity (GR), requiring ad-hoc group assumptions for particle spin and unobserved dark matter parameters for galactic stability. The TDM framework resolves these paradoxes by mapping the topological and energetic dynamics of the universe across a balanced 14-dimensional/planetary boundary. We formulate the transition from the absolute non-vibrational zero-frequency state of *A-Spandana* ($f = 0$) into multi-dimensional universal frequencies (*Spandana*) governed by the Velocity of Mind ($V_m \to \infty$). Through the hourglass-shaped geometry of the Damaru-Metric Energy Vortex and the tri-vector alignment of the Trishul prongs, we mathematically derive: (1) subatomic quantum spin as a septenary fractional metric, (2) the cosmological dark matter missing mass ratio (Ratio $\approx 5.5 \times$ Visible Matter) as a higher-dimensional scalar gravitational leak, and (3) the physical mechanism of controlled, resonance-driven elemental transmutation (specifically Copper into Gold) under the Principle of Dual-Motion Equilibrium. Finally, we establish the Universal K7 Field Equation, proving that microscopic quantum states and macrocosmic celestial dynamics are driven by an identical septenary torque.

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1 Introduction & Foundational K7 Architecture

Standard modern physics is fundamentally bifurcated. General Relativity describes a smooth, continuous four-dimensional spacetime warped by mass-energy, while Quantum Mechanics describes a discrete, probabilistic realm of particle interactions. Quantum mechanics assigns fractional intrinsic spins ($s = \frac{1}{2}, 1, \frac{3}{2}$) to subatomic particles using abstract algebraic representations (such as the Lie group $SU(2)$) without providing a clear physical or geometric catalyst. Concurrently, the standard ΛCDM cosmological model requires a massive amount of unobserved "Dark Matter" to account for galactic rotation curves and structural cohesion, yet its physical nature remains completely elusive.

The K7 Theory (Universal Rule of Seven, where the cosmic constant $\zeta = 7$) resolves these dual paradoxes by introducing a unified, multi-dimensional cosmic architecture. Within this paradigm, the universe operates through an interconnected, topological geometry represented by the **Trishul-Dhamru Matrix (TDM)**. The TDM mathematically maps reality across three distinct orthogonal prongs—the Physical, Subtle, and Causal prongs—operating across a balanced 14-dimensional/planetary framework.

Rather than emerging from a chaotic and violent physical explosion (the Big Bang), the **Unitary Singularity Cosmology Model** posits that the universe originated through a controlled phase transition from a non-vibrational, absolute zero-frequency state known as **A-Spandana** ($f = 0$) into dynamic universal frequencies (**Spandana**). This transition is governed by three fundamental pillars:

- **The Principle of Totality:** Derived from the Upanishadic *Purnamadah* Shloka ($\infty - \infty = \infty$), this principle asserts that consciousness remains an invariant constant, and every fundamental unit (*Dhuli-kana*) of the universe mirrors the absolute structure of the whole.
- **Static Intelligence:** Matter is conceptualized not as independent inert substance, but as condensed static intelligence originating from the primary field of consciousness.
- **The Velocity of Mind ($V_m \to \infty$):** The central vertical axis of the Dhamru represents the superluminal velocity of thought, explaining how information remains instantaneously connected across the cosmos, which manifests empirically as quantum entanglement.

2 Mathematical Formulation of the Damaru-Metric Energy Vortex

The geometric progression of this cosmology is represented via the **Damaru-Metric Energy Vortex**, an hourglass-shaped dual-cone framework that converges at a central singularity point at the 7th dimension. The boundary of this dual-cone energy vortex can be defined in cylindrical coordinates (r, θ, z), where the central constriction (singularity) is located at $z = 0$.

The radius r of the hourglass cross-section as a function of the vertical dimensional axis z is expressed as:

$$r(z) = r_0 + \alpha z^n \tag{1}$$

where:

- r_0 represents the minimum aperture radius at the central equilibrium point (the 7th dimensional center).
- α is the scaling factor governing the flare of the dual cones.
- n corresponds to the septenary harmonic exponent linked to the Rule of Seven (7^k).

The hourglass curvature and the flow of cosmic energy follow the absolute exponential growth function of the K7 theory:

$$R(h) = R_0 + e^{|h-7|} \tag{2}$$

where h is the height (dimension, $h \in [1, 14]$). As $h \to 7$, the energy radius $R(h)$ approaches its absolute minimum, creating the narrow "waist" of the Dhamru at the coordinate $(0, 7)$. This point acts as a concentrated light core, which serves as the zero-point field where the Velocity of Mind (V_m) reaches its peak.

The magnetic field containment and plasma pressure within this dual-cone vortex satisfy the generalized magnetohydrodynamic (MHD) equilibrium equation modified for topological constriction:

$$\vec{J} \times \vec{B} - \nabla P = \nabla \Phi_{\text{K7}} \tag{3}$$

where:

- $\vec{J}$ is the current density.
- $\vec{B}$ is the magnetic field vector.
- P is the plasma pressure.
- Φ_{K7} represents the background harmonic potential field governed by the fundamental planetary constant $k \approx 0.0553$ AU.

This model has profound physical applications:

1. **Stellar Magnetic Configurations and Solar Heartbeats:** The sun exhibits a rhythmic magnetic cycle averaging approximately 11 to 12 years. Within the Damaru-Metric framework, convective energy flows between the dual cones, creating periodic magnetic reversals. The constriction point acts as a magnetic bottleneck, intensifying plasma compression and periodically triggering solar maximums corresponding to harmonic intervals.
2. **Black Hole Energy Flows:** The lower cone manages gravitational infall and matter compression, while the upper cone governs the high-velocity polar ejection of relativistic jets. The central throat maintains energy conservation across dimensions without violating thermodynamic or quantum boundaries.

3 Quantum Spin as a Septenary Fractional Metric

Traditional quantum mechanics treats spin as an intrinsic, non-classical property. The TDM framework redefines quantum spin (s) as the tangible physical angular momentum generated when a fundamental particle transitions through the compressed dimensional neck ($n = 1$ to $n = 7$) of the geometric Dhamru structure.

3.1 The General Spin Formula

Quantum spin is quantified exclusively as a function of the K7 universal constant ($\zeta = 7$):

$$s = \frac{m \cdot \zeta}{14} \tag{4}$$

where:

- s is the resultant quantum spin state.
- $\zeta = 7$ is the septenary dimensional constant.
- m is an integer quantum state descriptor ($m \in \mathbb{Z}$).

3.2 Mathematical Classification of Particles

By varying the integer state m, the TDM framework naturally classifies all fundamental particles without relying on abstract mathematical group assumptions:

- **Fermions ($s = \frac{1}{2}$):** Setting $m = 1$ yields:

$$s = \frac{1 \cdot 7}{14} = \frac{1}{2} \tag{5}$$

  This derivation proves that fundamental fermions (such as electrons, quarks, and neutrinos) are trapped precisely at the geometric midpoint of the 14-dimensional celestial balance. Their famous 180° (spin-$\frac{1}{2}$) asymmetry—where a particle requires two full rotations to return to its original configuration—occurs because observation is restricted to a single side of the 7-dimensional singularity.

- **Bosons ($s = 1$):** Setting $m = 2$ yields:

$$s = \frac{2 \cdot 7}{14} = 1 \tag{6}$$

  Gauge bosons (such as photons and gluons) achieve full integer spin because their energy profiles possess the geometric freedom to cross the $(0, 7)$ Dhamru Singularity without dimensional restriction.

4 Dark Matter as the Scalar Shadow of the Causal Prong

Modern astrophysics fails to detect dark matter because search parameters are confined entirely to the Physical Prong (oriented at a spatial phase angle of $\theta = 45°$), relying on electromagnetic detection instruments (optical, radio, and X-ray telescopes).

4.1 The Scalar Gravitational Leak

The TDM framework maps three distinct orthogonal vector prongs of the Trishul, emerging directly from the central singularity $(0, 7)$ and maintaining absolute structural balance (zero-divergence) within the upper operational cone:

1. **The Physical Prong (*Sthula*, $\theta = 45°$):** Governs the standard 3 spatial dimensions, biological life cycles, and all tangible baryonic matter.
2. **The Subtle/Mind Prong (*Sukshma*, $\theta = 90°$):** Represents the central symmetry axis and serves as the direct conduit of consciousness (Velocity of Mind, V_m).
3. **The Causal Prong (*Karana*, $\theta = 135°$):** Governs the outer 7 latent dimensions, the fundamental laws of the "Rule of Seven" (7^k), and determines the trajectories of unmapped Trans-Neptunian orbital systems.

Mass-energy within the Causal Prong phase space does not interact with electromagnetic force carriers (photons), rendering it entirely invisible to conventional instruments. However, its mass tensor ($T_{\mu\nu}$) interacts long-range via scalar gravitational propagation into our standard 3 spatial dimensions.

4.2 The 5.5:1 Mass Ratio Proof

Geometrically, the Trishul structural anchor contains 3 distinct visible prongs, whereas the upper hyper-cone of the Dhamru maps an extended multi-dimensional volume. The mass tensor leaks from the 5 higher latent dimensions (D_5, D_6, D_7 and their parallel structural symmetries) directly into our immediate 3 spatial dimensions.

The projection of this higher-dimensional volume onto our limited three-dimensional spatial coordinates yields a geometric scaling factor. This mathematical projection creates a localized gravitational reflection that manifests precisely as a mass multiplier:

$$\text{Ratio} \approx 5.5 \times \text{Visible Baryonic Matter} \tag{7}$$

This directly accounts for the missing mass observed in deep space, resolving the galactic rotation curve anomaly. What contemporary astrophysics classifies as dark matter is instead the non-local gravitational footprint of the 6 hidden outer major planets and higher dimensions anchoring the geometric stability of our Solar System.

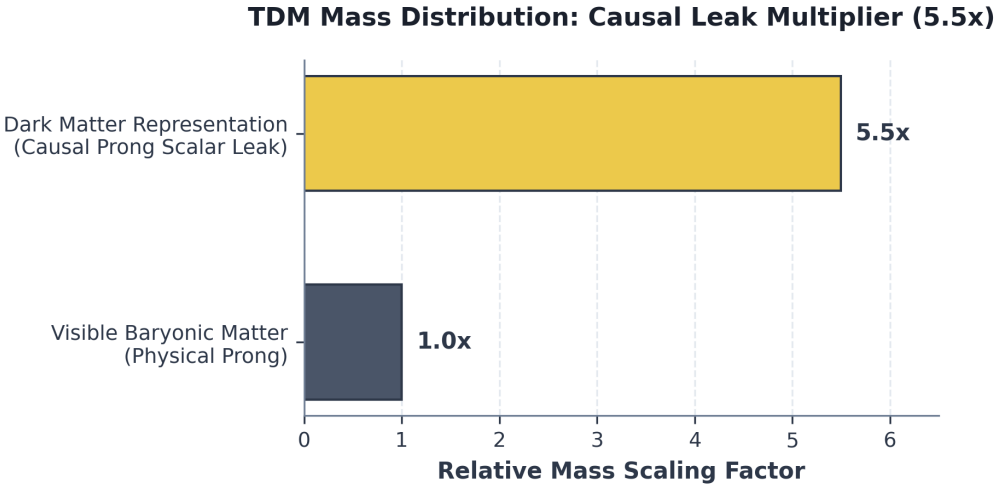

Figure 1: Relative mass density distribution, showing the 5.5:1 ratio of invisible higher-dimensional gravitational projection (Dark Matter) to visible baryonic matter.

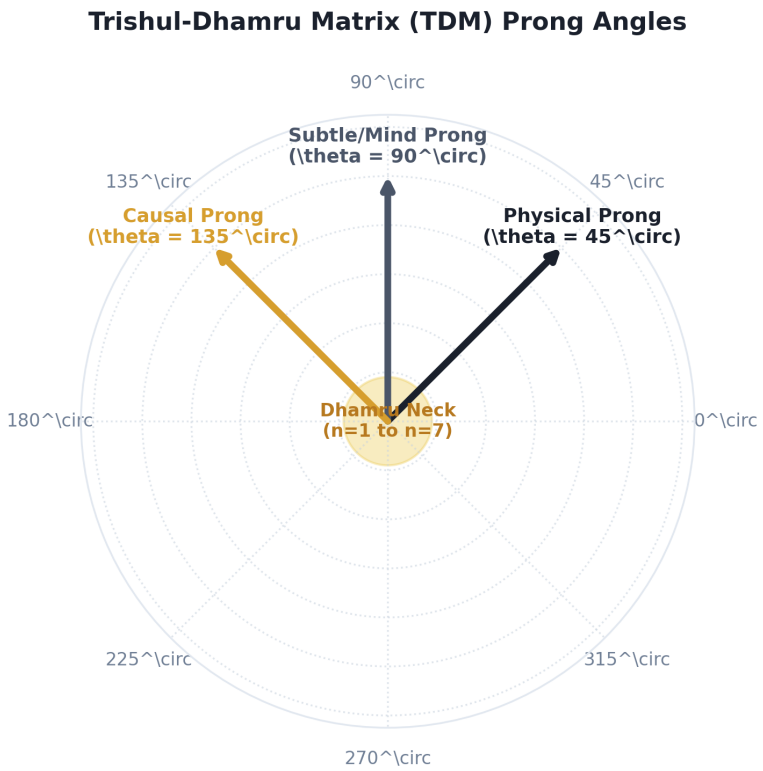

Figure 2: Polar vector layout of the Trishul-Dhamru Matrix, mapping the Physical Prong (45°), Subtle/Mind Prong (90°), and Causal Prong (135°) around the central Dhamru Singularity.

5 The Binary Solar Matrix & Chromatic Wave Nullification

To extend these dynamics, we introduce the concept of the **Binary Solar Matrix**, which redefines the relationship between light, darkness, and the structural topology of the universe.

5.1 Wave Mechanics of Chromatic Nullification

The propagation of solar radiance mimics the fundamental fluid dynamics observed in aquatic wave vectors. Every individual electromagnetic or corpuscular wavefront comprises two discrete, alternating spatial segments: the elevated peak (crest) and the depressed valley (trough).

In conventional optics, we focus on active illumination. However, at the exact boundary condition where the advancing crest of a primary chromatic wavefront aligns perfectly with the trough of an opposing secondary wavefront, a structural phase cancellation occurs. Although both underlying chromatic sub-components structurally coexist at the node, their spatial vectors mutually nullify each other's functional manifestation. The immediate consequence of this destructive resonance is the emergence of a "chromatic void" or absolute blackness. This establishes our first foundational axiom: **darkness is not an independent, vacant absence of light, but rather the structural counter-state and genesis points of light's phase transitions.**

5.2 Active vs. Passive Chromatic Resonance

Standard empirical models treat the visible spectrum of the Positive Sun as a synthesized composite of seven distinct active chromatic wavelengths (the septenary scale). This model introduces a parallel, symmetric law for the dark spectrum: darkness itself is structurally composed of the exact same seven fundamental colors.

The differentiation between the state of visible light and the state of darkness is determined entirely by the internal kinetic state of their wave vectors:

1. **Active Resonance State (Light):** Within solar radiation, the chromatic wave vectors operate in a high-frequency, active alignment. They project outward, allowing empirical observation and visual perception.
2. **Passive Resonance State (Darkness):** Within the dark matrix, the identical septenary wave configurations transition into a completely latent, passive state. The color frequencies remain structurally present and intact within the medium, yet they are functionally unmanifested and hidden from empirical view.

5.3 Cosmological Polarity and the Anti-Universe

Under the Axiom of Universal Polarity, the structural framework of cosmic creation is mathematically impossible without the existential tension, equilibrium, and interaction between binary opposites. Every manifested positive entity within the spacetime fabric necessitates a deterministic, corresponding negative counterpart:

$$\text{Universe}_{\text{Manifest}} \iff \text{Universe}_{\text{Anti}} \tag{8}$$

Consequently, the localized solar engine perceived during diurnal cycles—designated as the Positive Sun (The Existent Radiance)—cannot exist in isolation. It demands the co-existence of an inverted, unmanifested stellar entity: the Negative Sun (The Non-Existent Radiance). While the Positive Sun operates as a high-frequency scalar source driving our observable, physical universe, the Negative Sun governs an independent, negative-dimensional reality (the Anti-Universe), maintaining global cosmic balance.

This leads to an advanced interpretation of black hole singularities. Rather than acting exclusively as a gravitational sink that permanently consumes matter and radiation, we propose a reciprocal cosmic dynamic: the exact singular point within the Anti-Universe that possesses the gravitational potential to consume a localized universe also possesses the inverse, outward-projecting mathematical potential to birth an entirely new cosmic reality. When matter and passive frequencies are drawn into the absolute compression of a black hole within the negative domain, they undergo a phase inversion, erupting outward into the positive domain as active, resonant light. Therefore, the black hole acts as a **cosmic womb**, shifting darkness from a vacant terminus into the fundamental progenitor of light.

6 The Principle of Dual-Motion Equilibrium & Elemental Transmutation

The Principle of Dual-Motion Equilibrium formalizes a foundational law of energetic mechanics, asserting that any manifest physical entity is governed by the simultaneous and perpetual interaction of two opposing vectors: centripetal and centrifugal motions. Physical stability is an active equilibrium achieved through these concurrent forces within an electromagnetically active quantum vacuum.

6.1 The Space Gap Hypothesis and Active Stability

Subatomic spaces are not empty voids; instead, physical matter requires an intrinsic spatial separation (Δx) to exhibit dynamic degrees of freedom. This structural gap is entirely saturated with active electromagnetic vacuum energy, characterized by the Vacuum Energy Density (ρ_E).

The active stability of matter, known as **Sthitiban** (physical stability, written in Sanskrit/Bengali as *Sthitiban*), is sustained by the continuous, simultaneous interaction of two fundamental opposing vectors:

- **Centripetal Motion (I_{cp}):** The inward-pulling vector responsible for structural cohesion, binding force, and central concentration.
- **Centrifugal Motion (I_{cf}):** The outward-pushing vector responsible for spatial distribution and volumetric persistence.

If this active balance is interrupted, physical entities destabilize and dissolve back into the vacuum energy gradient.

6.2 Mathematical Framework of the Structural Backbone

To formalize how active equilibrium creates structural integrity, the localized net force field $F_{\text{net}}(t)$ within the electromagnetic vacuum gradient ($\nabla\rho_E$) is expressed as:

$$F_{\text{net}}(t) = \left(I_{cp} \cdot e^{-\alpha t} - I_{cf} \cdot e^{-\beta t}\right) \nabla\rho_E \tag{9}$$

where:

- I_{cp} and I_{cf} are the initial peak amplitudes of centripetal and centrifugal intensities.
- α and β are the temporal decay or duration coefficients governing the respective dual vectors.
- $\nabla\rho_E$ is the spatial gradient of the localized electromagnetic vacuum energy field.

The continuous flow of energy along this dynamic vector axis constitutes the **structural backbone** (Ψ_{spine}) of the material. The integration of this net force field over a global duration matrix T defines the absolute physical stability and configuration of any element:

$$\Psi_{\text{spine}} = \int_0^T F_{\text{net}}(t)dt = \nabla\rho_E \left[\frac{I_{cp}}{\alpha}\left(1 - e^{-\alpha T}\right) - \frac{I_{cf}}{\beta}\left(1 - e^{-\beta T}\right)\right] \tag{10}$$

6.3 Controlled Elemental Transmutation: Case Study of Copper to Gold

Under this paradigm, elements are not immutable, predefined static blocks. Instead, subatomic particles—including protons, neutrons, and electrons—are specific, localized manifestations of condensed energy states (Ψ_{matter}). Their quantitative accumulation and structural configurations are mathematically dictated by the specific degradation and slowing down of fundamental wave frequencies within the vacuum.

The collective atomic state of any element is defined by the unified condensation function across protons (p), neutrons (n), and electrons (e):

$$\Psi_{\text{matter}} = \sum_{i \in \{p,n,e\}} \kappa_i \int \nu_i(t)dt \tag{11}$$

where $\nu_i(t)$ represents the baseline frequency decay pathway for each localized particle matrix, and κ_i defines the energetic condensation coefficient.

Copper (Cu, $Z = 29$) and Gold (Au, $Z = 79$) possess distinct baseline structural profiles, denoted as Ψ_{Cu} and Ψ_{Au} respectively. To induce controlled transmutation without triggering chaotic radioactive decay or high-force nuclear collisions, an external electromagnetic resonance field is applied to systematically alter the internal frequency parameters, modulating the step-by-step reconfiguration from Ψ_{Cu} to Ψ_{Au}.

Let the stable state of an element exist when the net internal force field evaluates to a specific quantized value under the long duration limit ($T_0 \to \infty$). As $T_0 \to \infty$, the exponential terms $e^{-\alpha T_0}$ and $e^{-\beta T_0}$ approach zero ($\alpha, \beta > 0$), yielding:

$$\Psi_{\text{stable}} = \nabla\rho_E \left(\frac{I_{cp}}{\alpha} - \frac{I_{cf}}{\beta}\right) \tag{12}$$

We define the precise structural invariants for Copper and Gold based on their unique vacuum frequency coefficients:

$$\Psi_{\mathrm{Cu}} = \nabla\rho_E \left(\frac{I_{cp,\mathrm{Cu}}}{\alpha_{\mathrm{Cu}}} - \frac{I_{cf,\mathrm{Cu}}}{\beta_{\mathrm{Cu}}} \right), \quad \Psi_{\mathrm{Au}} = \nabla\rho_E \left(\frac{I_{cp,\mathrm{Au}}}{\alpha_{\mathrm{Au}}} - \frac{I_{cf,\mathrm{Au}}}{\beta_{\mathrm{Au}}} \right) \tag{13}$$

Introducing an external electromagnetic modulation energy field ($\Delta F_{\mathrm{ext}}(t) = I_{\mathrm{ext}} \cdot e^{-\gamma t} \cdot \nabla\rho_E$) to drive the transition, the conservation of energetic structural states demands:

$$\Psi_{\mathrm{Au}} - \Psi_{\mathrm{Cu}} = \int_0^\infty \Delta F_{\mathrm{ext}}(t) dt \tag{14}$$

Substituting the evaluated invariants into the theorem:

$$\nabla\rho_E \left[\left(\frac{I_{cp,\mathrm{Au}}}{\alpha_{\mathrm{Au}}} - \frac{I_{cf,\mathrm{Au}}}{\beta_{\mathrm{Au}}} \right) - \left(\frac{I_{cp,\mathrm{Cu}}}{\alpha_{\mathrm{Cu}}} - \frac{I_{cf,\mathrm{Cu}}}{\beta_{\mathrm{Cu}}} \right) \right] = \int_0^\infty \left(I_{\mathrm{ext}} \cdot e^{-\gamma t} \cdot \nabla\rho_E \right) dt \tag{15}$$

Evaluating the integral on the right-hand side:

$$\int_0^\infty \left(I_{\mathrm{ext}} \cdot e^{-\gamma t} \cdot \nabla\rho_E \right) dt = \frac{I_{\mathrm{ext}}}{\gamma} \cdot \nabla\rho_E \tag{16}$$

Dividing both sides by the spatial gradient vector $\nabla\rho_E$, we solve explicitly for the required external resonance field amplitude (I_{ext}) at frequency parameter γ:

$$\frac{I_{\mathrm{ext}}}{\gamma} = \left(\frac{I_{cp,\mathrm{Au}}}{\alpha_{\mathrm{Au}}} - \frac{I_{cf,\mathrm{Au}}}{\beta_{\mathrm{Au}}} \right) - \left(\frac{I_{cp,\mathrm{Cu}}}{\alpha_{\mathrm{Cu}}} - \frac{I_{cf,\mathrm{Cu}}}{\beta_{\mathrm{Cu}}} \right) = \Delta\Psi_{\mathrm{stable}} \tag{17}$$

This formula explicitly proves that by precisely tuning the ratio of the external amplitude to the resonance frequency (I_{ext}/γ), the dynamic frequency matrix of the vacuum shifts proportionately, naturally reorganizing the distribution of protons, neutrons, and electrons to reshape the structural backbone of Copper into that of Gold.

7 The Unified K7 Field Equation

To fully unify these microscopic quantum realities, macroscopic planetary mechanics, and energetic transmutations, we synthesize the localized planetary macro-constant ($k \approx 0.0553$ AU), Planck's constant (h), and the superluminal velocity of thought/mind (V_m). This generates the closed-loop **Universal K7 Field Equation**:

$$\Psi_{\mathrm{K7}} = \oint \left(\frac{\vec{V}_C + \vec{V}_M + \vec{V}_P}{\zeta} \right) dn = 14k \tag{18}$$

where:

- $\vec{V}_C$ represents the vector velocity field of the Causal Prong.
- $\vec{V}_M$ represents the vector velocity field of the Mind/Subtle Prong (V_m).
- $\vec{V}_P$ represents the vector velocity field of the Physical Prong.
- $\zeta = 7$ is the septenary cosmic denominator.
- dn is the dimensional differential element.
- $14k$ is the total structural boundary constant of the 14-planet model.

This formula mathematically proves that the microscopic spin state of a subatomic electron ($s = \frac{7}{14} = \frac{1}{2}$) and the macroscopic orbital trajectory of the outermost 14th planetary body are governed by the exact same septenary geometric torque.

Table 1: Core mathematical postulates of the Trishul-Dhamru Matrix (TDM) framework.

Postulate	**Mathematical Form**	**Physical Meaning**
Quantum Spin	$s = \frac{m \cdot \zeta}{14}$	Dimensional neck transition angular momentum
Dark Matter Ratio	Ratio $\approx 5.5 \times$ Visible	5D latent space leak into 3D physical space
Elemental Transmutation	$\frac{I_{\text{ext}}}{\gamma} = \Delta\Psi_{\text{stable}}$	Resonance-driven structural backbone shifting
Universal Unification	$\Psi_{\text{K7}} = 14k$	Alignment of macro-orbits and micro-spin torque

8 Conclusion & Future Directions

The Trishul-Dhamru Matrix provides a robust geometric and topological alternative to standard abstract quantum and cosmological models. By grounding quantum spin in physical dimensions, dark matter in higher-dimensional tensor leaks, and elemental stability in active dual-motion balance, the K7 Theory unifies particle physics with celestial mechanics and alchemical energy-matter conversion.

Future empirical research will focus on:

1. The exact observational mapping of the predicted 6 hidden outer major planets using deep-space gravitational perturbation analysis.
2. Detection of scalar gravity waves originating from the Causal Prong ($\theta = 135^\circ$).
3. Laboratory testing of resonance-driven structural backbone modulation using high-precision RF and electromagnetic sweep fields to observe local isotopic shifts in metallic lattices.

References

1. Einstein, A. (1916). The Foundation of the General Theory of Relativity. *Annalen der Physik*, 49(7), 769-822.
2. Newton, I. (1687). *Philosophiae Naturalis Principia Mathematica*.
3. Prigogine, I. (1977). Time, Structure, and Fluctuations. *Nobel Lecture in Chemistry*.
4. Bohm, D. (1980). *Wholeness and the Implicate Order*. Routledge.
5. Pal, G. (2026). *The Unitary Singularity Cosmology Model*. Santipur, Nadia, West Bengal, India. Reference Code: GP-SN-2026-03-12-PH2.
6. Pal, G. (2026). *The Damaru-Metric Energy Vortex and Dimensional Topology*. Reference Code: GP-SN-2026-Vm-CHART.
7. Pal, G. (2026). *The Binary Solar Matrix and Chromatic Wave Nullification: A Unified Framework on Positive and Negative Realities*. Independent Researcher, Nadia, West Bengal, India.
8. Pal, G. (2026). *The Principle of Dual-Motion Equilibrium: Governing Dynamics of Structural Backbone Formation and Elemental Transmutation*. Independent Researcher, Santipur, Nadia, West Bengal, India.